

# Scott E Field

## List of Publications by Year in descending order

Source: <https://exaly.com/author-pdf/5285205/publications.pdf>

Version: 2024-02-01

32  
papers

1,950  
citations

279798

23  
h-index

434195

31  
g-index

32  
all docs

32  
docs citations

32  
times ranked

1325  
citing authors

#	ARTICLE	IF	CITATIONS
1	The SXS collaboration catalog of binary black hole simulations. <i>Classical and Quantum Gravity</i> , 2019, 36, 195006.	4.0	217
2	Surrogate models for precessing binary black hole simulations with unequal masses. <i>Physical Review Research</i> , 2019, 1, .	3.6	213
3	Surrogate model of hybridized numerical relativity binary black hole waveforms. <i>Physical Review D</i> , 2019, 99, .	4.7	153
4	Fast Prediction and Evaluation of Gravitational Waveforms Using Surrogate Models. <i>Physical Review X</i> , 2014, 4, .	8.9	137
5	Numerical relativity waveform surrogate model for generically precessing binary black hole mergers. <i>Physical Review D</i> , 2017, 96, .	4.7	134
6	Fast and Accurate Prediction of Numerical Relativity Waveforms from Binary Black Hole Coalescences Using Surrogate Models. <i>Physical Review Letters</i> , 2015, 115, 121102.	7.8	124
7	Fast and accurate inference on gravitational waves from precessing compact binaries. <i>Physical Review D</i> , 2016, 94, .	4.7	116
8	A Surrogate model of gravitational waveforms from numerical relativity simulations of precessing binary black hole mergers. <i>Physical Review D</i> , 2017, 95, .	4.7	96
9	Accelerated Gravitational Wave Parameter Estimation with Reduced Order Modeling. <i>Physical Review Letters</i> , 2015, 114, 071104.	7.8	79
10	SpECTRE: A task-based discontinuous Galerkin code for relativistic astrophysics. <i>Journal of Computational Physics</i> , 2017, 335, 84-114.	3.8	77
11	Reduced Basis Catalogs for Gravitational Wave Templates. <i>Physical Review Letters</i> , 2011, 106, 221102.	7.8	76
12	Surrogate model for gravitational wave signals from comparable and large-mass-ratio black hole binaries. <i>Physical Review D</i> , 2020, 101, .	4.7	57
13	Eccentric binary black hole surrogate models for the gravitational waveform and remnant properties: Comparable mass, nonspinning case. <i>Physical Review D</i> , 2021, 103, .	4.7	53
14	Gravitational wave parameter estimation with compressed likelihood evaluations. <i>Physical Review D</i> , 2013, 87, .	4.7	52
15	Parametrized tests of the strong-field dynamics of general relativity using gravitational wave signals from coalescing binary black holes: Fast likelihood calculations and sensitivity of the method. <i>Physical Review D</i> , 2018, 97, .	4.7	40
16	Discontinuous Galerkin method for computing gravitational waveforms from extreme mass ratio binaries. <i>Classical and Quantum Gravity</i> , 2009, 26, 165010.	4.0	36
17	Discontinuous Galerkin method for the spherically reduced Baumgarte-Shapiro-Shibata-Nakamura system with second-order operators. <i>Physical Review D</i> , 2010, 82, .	4.7	35
18	Two-Step Greedy Algorithm for Reduced Order Quadratures. <i>Journal of Scientific Computing</i> , 2013, 57, 604-637.	2.3	34

#	ARTICLE	IF	CITATIONS
19	Constraining the parameters of GW150914 and GW170104 with numerical relativity surrogates. Physical Review D, 2019, 99, .	4.7	32
20	Numerical simulations with a first-order BSSN formulation of Einstein's field equations. Physical Review D, 2012, 85, .	4.7	29
21	Impact of subdominant modes on the interpretation of gravitational-wave signals from heavy binary black hole systems. Physical Review D, 2020, 101, .	4.7	28
22	Evidence of Large Recoil Velocity from a Black Hole Merger Signal. Physical Review Letters, 2022, 128, .	7.8	26
23	Towards beating the curse of dimensionality for gravitational waves using reduced basis. Physical Review D, 2012, 86, .	4.7	24
24	Bayesian Inference for Gravitational Waves from Binary Neutron Star Mergers in Third Generation Observatories. Physical Review Letters, 2021, 127, 081102.	7.8	21
25	Persistent junk solutions in time-domain modeling of extreme mass ratio binaries. Physical Review D, 2010, 81, .	4.7	16
26	Improved analysis of GW190412 with a precessing numerical relativity surrogate waveform model. Physical Review D, 2021, 103, .	4.7	15
27	Genetic-algorithm-optimized neural networks for gravitational wave classification. Neural Computing and Applications, 2021, 33, 13859-13883.	5.6	11
28	Modern Gravitational Lens Cosmology for Introductory Physics and Astronomy Students. Physics Teacher, 2015, 53, 266-270.	0.3	10
29	High precision source characterization of intermediate mass-ratio black hole coalescences with gravitational waves: The importance of higher order multipoles. Physical Review D, 2021, 104, .	4.7	5
30	Fast Evaluation of Far-Field Signals for Time-Domain Wave Propagation. Journal of Scientific Computing, 2015, 64, 647-669.	2.3	2
31	Learning orbital dynamics of binary black hole systems from gravitational wave measurements. Physical Review Research, 2021, 3, .	3.6	2
32	Accelerating parameter estimation of gravitational waves from black hole binaries with reduced order quadratures. , 2017, , .		0